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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/731,882

12/09/2003

James Rohl

279.630US1

6739

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03/16/2010

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MINNEAPOLIS, MN 55402

EXAMINER

NGUYEN, PHONG H

ART UNIT

PAPER NUMBER

3724

NOTIFICATION DATE

DELIVERY MODE

03/16/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com

request@slwip.com

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/731,882 | <b>Applicant(s)</b><br>ROHL ET AL. |  |
|                              | <b>Examiner</b><br>PHONG H. NGUYEN   | <b>Art Unit</b><br>3724            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-12 and 53-66 is/are pending in the application.
- 4a) Of the above claim(s) 53-56 and 58-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-12, 57 and 64-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/27/2009</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of "the ridge including an opening to the interior of the die hole" in claims 10 and 65 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. It is to be noted that element 705 represented a ridge does not have any discontinuous section to be called "an opening".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10-12 and 64-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 65 require that the ridge not extend around the entire periphery of the upper end of the die hole. However, Fig. 7B shows that the ridge 705 extends entirely around the entire periphery of the upper end of the die hole. There is no discontinuity of ridge 705 in Fig. 7A. Claims 10 and 65 will be examined as best understood by the Examiner.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10, 12, 64 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Tsubota (5,361,660) in view of Lyon (2,821,156).

Tsubota discloses placing sheet A between punch 3 and die 7, 11; die hole is in the center of element 7, through which punch 3 passes; delivering lubricant via element 21 as shown in figure 1; actuating the punch as shown in figure 2; the element A in figure 2, which is shown

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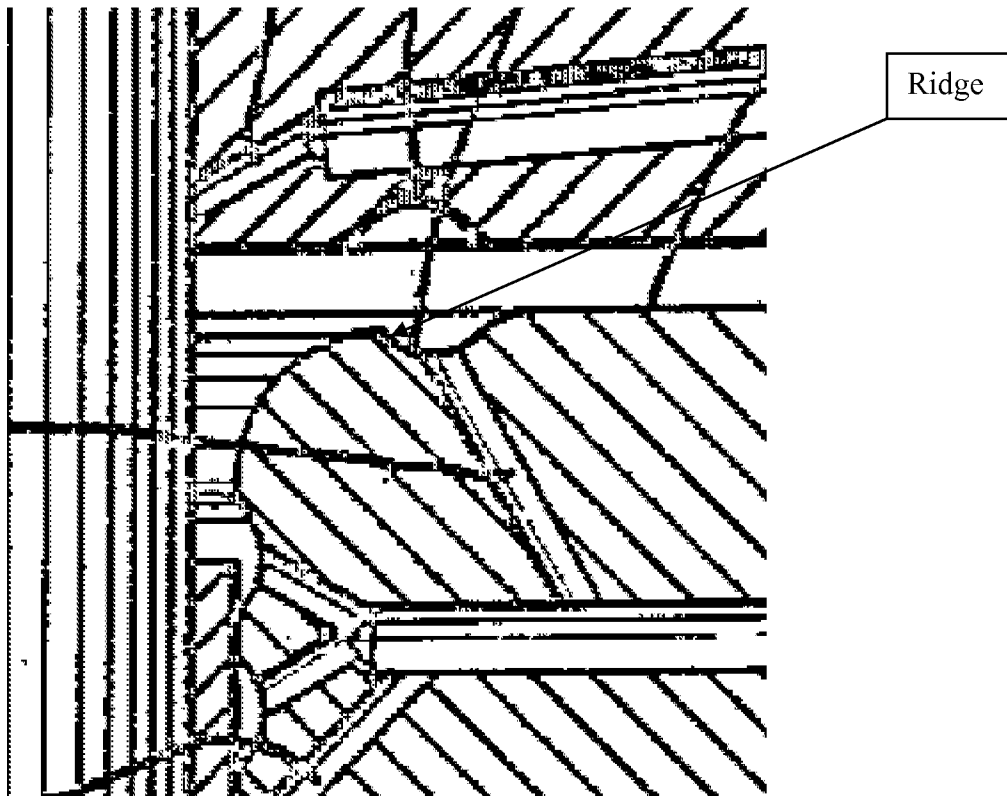
passing through elements 7 and 11 is considered to be an electrode layer for a flat capacitor; the sheet is aluminum as disclosed in column 4, line 31; aluminum sheets inherently have an aluminum oxide portion due to the sheets exposure to air as evidenced by Frank et al (2,854,074) in column 1, line 27-29; the portions of the aluminum sheet that are exposed to air and have aluminum oxide on them are considered to be distinct portions; the aluminum portion of the sheet is considered to be a distinct aluminum portion; the lubricant is concentrated on the periphery of the die hole where the punch cuts through the aluminum portion as shown in figure 1, and each location about the periphery of the die hole is considered to be a specific predetermined location on the periphery of the die hole.

Tsubota does not teach the die hole having a lubricant dam having a ridge extending around a periphery of an open upper end of the die hole and a reservoir behind the ridge; and delivering a lubricant to the lubricant dam by an opening on the dam.

Lyon teaches a die hole having a lubricant dam 37 having a ridge extending around a periphery of an open upper end of the die hole and a reservoir behind the ridge; and delivering a lubricant to the lubricant dam by an opening 41 for reducing heat. See Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate a lubricant dam as taught by Lyon to the Tsubota's die for delivering lubricant to a workpiece to reduce heat.

Regarding the limitation of an opening on the ridge, it appears that there is no opening on the ridge 705 as shown in Fig. 7A of the disclosure.



6. Claims 11 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubota (5,361,660) in view of Lyon (2,821,156) as applied to claims 10 and 65 above, and further in view of Klint et al (3,288,715), hereafter Klint.

Tsubota discloses everything as noted above, but does not disclose delivering a partially fluorinated fluid, however, Klint teaches delivering a partially fluorinated fluid in column 2, lines 2-4.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to deliver a partially fluorinated fluid in Tsubota as taught by Klint in order to obtain a bright surface on the fabricated aluminum.

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7. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubota (5,361,660) in view of Lyon (2,821,156) as applied to claim 10 above, and further in view of 3M.

Tsubota discloses everything, but the partially fluorinated fluid is not Fluorinert fluid, however, 3M teaches the advantages of delivering Fluorinert fluid.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to deliver a Fluorinert fluid in Tsubota and Klint as taught by 3M in order to use a lubricant that does not contribute to ground-level smog formation.

#### ***Response to Arguments***

8. Applicant's arguments filed 10/27/2009 have been fully considered but they are not persuasive.

The Applicant argues that Lyon does not teach a ridge not extending entirely around the periphery of the upper end of the die hole. This argument is not persuasive. Fig. 7A of the disclosure shows that the ridge 705 extends entirely around the periphery of the upper end of the die hole.

#### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHONG H. NGUYEN whose telephone number is (571)272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Primary Examiner, Art Unit 3724

/Phong H Nguyen/  
Examiner, Art Unit 3724  
March 9, 2010